



## **EU24/EU24BL Expansion Module**

### **User Guide**

555-250-702  
Issue 2  
April 2005



#### Notice

Every effort was made to ensure that the information in this document was complete and accurate at the time of printing. However, information is subject to change.

#### Warranty

Avaya Inc. provides a limited warranty on this product. Refer to your sales agreement to establish the terms of the limited warranty. In addition, Avaya's standard warranty language as well as information regarding support for this product, while under warranty, is available through the following Web site: <http://www.avaya.com/support>.

#### Preventing Toll Fraud

"Toll fraud" is the unauthorized use of your telecommunications system by an unauthorized party (for example, a person who is not a corporate employee, agent, subcontractor, or is not working on your company's behalf). Be aware that there may be a risk of toll fraud associated with your system and that, if toll fraud occurs, it can result in substantial additional charges for your telecommunications services.

#### Avaya Fraud Intervention

If you suspect that you are being victimized by toll fraud and you need technical assistance or support, in the United States and Canada, call the Technical Service Center's Toll Fraud Intervention Hotline at 1-800-643-2353.

#### Disclaimer

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#### How to Get Help

For additional support telephone numbers, go to the Avaya support Web site: <http://www.avaya.com/support>. If you are:

- Within the United States, click the *Escalation Contacts* link that is located under the *Support Tools* heading. Then click the appropriate link for the type of support that you need.
- Outside the United States, click the *Escalation Contacts* link that is located under the *Support Tools* heading. Then click the *International Services* link that includes telephone numbers for the international Centers of Excellence.

#### Providing Telecommunications Security

Telecommunications security (of voice, data, and/or video communications) is the prevention of any type of intrusion to (that is, either unauthorized or malicious access to or use of) your company's telecommunications equipment by some party.

Your company's "telecommunications equipment" includes both this Avaya product and any other voice/data/video equipment that could be accessed via this Avaya product (that is, "networked equipment").

An "outside party" is anyone who is not a corporate employee, agent, subcontractor, or is not working on your company's behalf. Whereas, a "malicious party" is anyone (including someone who may be otherwise authorized) who accesses your telecommunications equipment with either malicious or mischievous intent.

Such intrusions may be either to/through synchronous (time-multiplexed and/or circuit-based) or asynchronous (character-, message-, or packet-based) equipment or interfaces for reasons of:

- Utilization (of capabilities special to the accessed equipment)
- Theft (such as, of intellectual property, financial assets, or toll facility access)
- Eavesdropping (privacy invasions to humans)
- Mischief (troubling, but apparently innocuous, tampering)
- Harm (such as harmful tampering, data loss or alteration, regardless of motive or intent)

Be aware that there may be a risk of unauthorized intrusions associated with your system and/or its networked equipment. Also realize that, if such an intrusion should occur, it could result in a variety of losses to your company (including but not limited to, human/data privacy, intellectual property, material assets, financial resources, labor costs, and/or legal costs).

#### Responsibility for Your Company's Telecommunications Security

The final responsibility for securing both this system and its networked equipment rests with you - Avaya's customer system administrator, your telecommunications peers, and your managers. Base the fulfillment of your responsibility on acquired knowledge and resources from a variety of sources including but not limited to:

- Installation documents
- System administration documents
- Security documents
- Hardware-/software-based security tools
- Shared information between you and your peers
- Telecommunications security experts

To prevent intrusions to your telecommunications equipment, you and your peers should carefully program and configure:

- Your Avaya-provided telecommunications systems and their interfaces
- Your Avaya-provided software applications, as well as their underlying hardware/software platforms and interfaces
- Any other equipment networked to your Avaya products

#### TCP/IP Facilities

Customers may experience differences in product performance, reliability and security depending upon network configurations/design and topologies, even when the product performs as warranted.

#### Standards Compliance

Avaya Inc. is not responsible for any radio or television interference caused by unauthorized modifications of this equipment or the substitution or attachment of connecting cables and equipment other than those specified by Avaya Inc. The correction of interference caused by such unauthorized modifications, substitution or attachment will be the responsibility of the user. Pursuant to Part 15 of the Federal Communications Commission (FCC) Rules, the user is cautioned that changes or modifications not expressly approved by Avaya Inc. could void the user's authority to operate this equipment.

#### Product Safety Standards

This product complies with and conforms to the following international Product Safety standards as applicable:

Safety of Information Technology Equipment, IEC 60950, 3rd Edition, or IEC 60950-1, 1st Edition, including all relevant national deviations as listed in Compliance with IEC for Electrical Equipment (IECEE) CB-96A.

Safety of Information Technology Equipment, CAN/CSA-C22.2 No. 60950-00 / UL 60950, 3rd Edition, or CAN/CSA-C22.2 No. 60950-1-03 / UL 60950-1.

Safety Requirements for Information Technology Equipment, AS/NZS 60950:2000.

One or more of the following Mexican national standards, as applicable: NOM 001 SCFI 1993, NOM SCFI 016 1993, NOM 019 SCFI 1998

#### Electromagnetic Compatibility (EMC) Standards

This product complies with and conforms to the following international EMC standards and all relevant national deviations:

Limits and Methods of Measurement of Radio Interference of Information Technology Equipment, CISPR 22:1997, EN55022:1998, and AS/NZS 3548.

Information Technology Equipment – Immunity Characteristics – Limits and Methods of Measurement, CISPR 24:1997 and EN55024:1998, including:

- Electrostatic Discharge (ESD) IEC 61000-4-2
- Radiated Immunity IEC 61000-4-3
- Electrical Fast Transient IEC 61000-4-4
- Lightning Effects IEC 61000-4-5
- Conducted Immunity IEC 61000-4-6

#### Federal Communications Commission Statement

##### Part 15:

**Note: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.**

## Part 68: Answer-Supervision Signaling

Allowing this equipment to be operated in a manner that does not provide proper answer-supervision signaling is in violation of Part 68 rules. This equipment returns answer-supervision signals to the public switched network when:

- answered by the called station,
- answered by the attendant, or
- routed to a recorded announcement that can be administered by the customer premises equipment (CPE) user.

This equipment returns answer-supervision signals on all direct inward dialed (DID) calls forwarded back to the public switched telephone network. Permissible exceptions are:

- A call is unanswered.
- A busy tone is received.
- A reorder tone is received.

Avaya attests that this registered equipment is capable of providing users access to interstate providers of operator services through the use of access codes. Modification of this equipment by call aggregators to block access dialing codes is a violation of the Telephone Operator Consumers Act of 1990.

## Means of Connection

Connection of this equipment to the telephone network is shown in the following tables.

## Canadian Department of Communications (DOC) Interference Information

This Class B digital apparatus complies with Canadian ICES-003.

Cet appareil numérique de la classe B est conforme à la norme NMB-003 du Canada.

This equipment meets the applicable Industry Canada Terminal Equipment Technical Specifications. This is confirmed by the registration number. The abbreviation, IC, before the registration number signifies that registration was performed based on a Declaration of Conformity indicating that Industry Canada technical specifications were met. It does not imply that Industry Canada approved the equipment.

## Declarations of Conformity

United States FCC Part 68 Supplier's Declaration of Conformity (SDoC) Avaya Inc. in the United States of America hereby certifies that the equipment described in this document and bearing a TIA TSB-168 label identification number complies with the FCC's Rules and Regulations 47 CFR Part 68, and the Administrative Council on Terminal Attachments (ACTA) adopted technical criteria.

Avaya further asserts that Avaya handset-equipped terminal equipment described in this document complies with Paragraph 68.316 of the FCC Rules and Regulations defining Hearing Aid Compatibility and is deemed compatible with hearing aids.

Copies of SDoCs signed by the Responsible Party in the U. S. can be obtained by contacting your local sales representative and are available on the following Web site: <http://www.avaya.com/support>.

All Avaya media servers and media gateways are compliant with FCC Part 68, but many have been registered with the FCC before the SDoC process was available. A list of all Avaya registered products may be found at: <http://www.part68.org> by conducting a search using "Avaya" as manufacturer.

## European Union Declarations of Conformity



Avaya Inc. declares that the equipment specified in this document bearing the "CE" (Conformité Européenne) mark conforms to the European Union Radio and Telecommunications Terminal Equipment Directive (1999/5/EC), including the Electromagnetic Compatibility Directive (89/336/EEC) and Low Voltage Directive (73/23/EEC). This equipment has been certified to meet CTR3 Basic Rate Interface (BRI) and CTR4 Primary Rate Interface (PRI) and subsets thereof in CTR12 and CTR13, as applicable.

Copies of these Declarations of Conformity (DoCs) can be obtained by contacting your local sales representative and are available on the following Web site: <http://www.avaya.com/support>.

## Japan

This is a Class B product based on the standard of the Voluntary Control Council for Interference by Information Technology Equipment (VCCI). If this equipment is used in a domestic environment, radio disturbance may occur, in which case, the user may be required to take corrective actions.

この装置は、情報処理装置等電波障害自主規制協議会（VCCI）の基準に基づくクラスA情報技術装置です。この装置を家庭環境で使用すると電波妨害を引き起こすことがあります。この場合には使用者が適切な対策を講ずるよう要求されることがあります。

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For the most current versions of documentation, go to the Avaya support Web site: <http://www.avaya.com/support>.

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## Contents

# About The EU24/EU24BL Expansion Module

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## Overview

The EU24/EU24BL Expansion Module is an optional device that extends the number of call appearances and Feature buttons available on the telephone. The EU24 and EU24BL Expansion Modules are identical in terms of features and functionality. The EU24BL has a backlit display area and is used with different telephone models than the EU24, which does not have a backlit display.

Use the EU24 with these Avaya telephones:

- 2420 Digital Telephone
- 4620/4620SW IP Telephone

Use the EU24BL with these Avaya telephones:

- 4621SW IP Telephone
- 4622SW IP Telephone

The expansion module has 24 buttons arranged in two columns. Depending on how they have been programmed for your call processing system, these buttons can be call appearances, which are lines for incoming and outgoing calls, or features like Call Forwarding.

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## Issue Date

This document was issued for the first time in May, 2002. This document was revised for Issue 2 in April, 2005 to include the EU24BL Expansion Module. Procedures to adjust the expansion module's contrast and its viewing angle were also added for Issue 2.

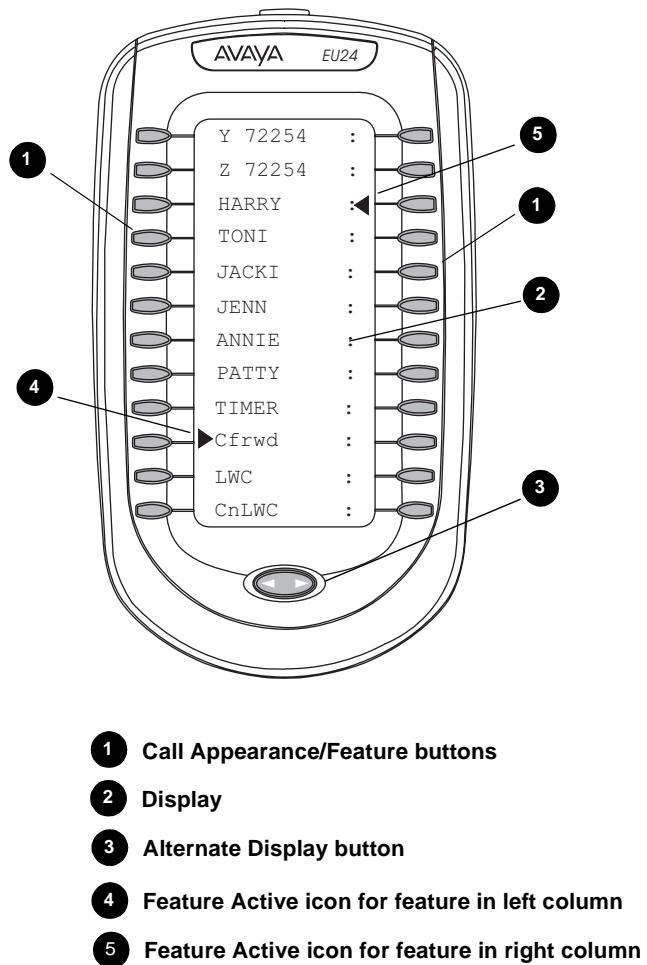
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## The EU24/EU24BL Expansion Module

[Figure 1](#) shows a top view of the EU24/EU24BL, with the left column displayed for illustration purposes.

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**Figure 1: The EU24/EU24BL Expansion Module**



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## Requirements

Before you can use the EU24/EU24BL Expansion Module, you must connect the module to the telephone. See the *EU24/EU24BL Expansion Module Installation and Safety Instructions* (555-233-136) for instructions.

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## Using the EU24/EU24BL Expansion Module

The following sections explain how to use the features of the EU24/EU24BL Expansion Module. For more information, consult your system administrator.

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### Adjusting the Viewing Angle

You can adjust the expansion module's viewing angle to match that of the phone to which it is attached.

#### To Adjust the Expansion Module Upward

1. Hold the EU24/EU24BL base with one hand.
2. Grasp the top of the module and pull up until the module's height equals that of the telephone.
3. Ensure that the movable section on the underside of the module clicks into the appropriate height adjustment notch on the expansion module's base.

#### To Adjust the Expansion Module Downward

1. Hold the EU24/EU24BL base with one hand.
2. Depress the button on the top edge of the module and gently push the expansion module down until the module's height equals that of the telephone.
3. Ensure that the movable section on the underside of the module clicks into the appropriate height adjustment notch on the expansion module's base.

## Viewing the Alternate Display

Although the EU24/EU24BL Expansion Module supports an additional 24 Call Appearance/Feature buttons, it displays only the button labels for one column of 12 buttons at a time. A dotted line separates the left column from the right column. When you view the labels and icons for the left column, the icons for any active or selected right column features display to the right of the dotted line. To view the column not currently displayed, press the **Alternate Display** button. You can alternately press any Call Appearance/Feature button on the column not currently displayed. Doing so displays that column and selects the line/feature associated with the button you pressed.

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## Selecting a Call Appearance/Feature Button

To select an available call appearance or feature, press the button next to the appropriate label in the column currently displayed. If you select a button not programmed as a Call Appearance or a Feature button, an error tone sounds.

If the desired call appearance or feature is not currently displayed, use the **Alternate Display** button to access the additional Call Appearance/Feature button labels. See [Viewing the Alternate Display](#) for more information.

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## Changing the EU24/EU24BL Contrast

On first-time startup, the display area contrast is set to a mid-level. To adjust it to better suit your work environment and lighting, 15 contrast levels are available.

**Note:**

You might not be able to distinguish between all 15 contrast level settings. Some of the upper and/or some of the lower contrast level settings might appear identical to adjacent settings. This is normal.

### Changing the Display Contrast Using a 2420 Digital Telephone

1. With the EU24 attached to your phone, press the telephone's **Option** softkey.
2. Select the **Contrast** Line/Feature button.
3. Press the Line/Feature button on either side of the line in which you see **EU24**. Doing so identifies that you want to adjust the display contrast and highlights that line.

4. To brighten the contrast, press the telephone's **Right Page** button until you reach the desired contrast level. To dim the contrast, press the telephone's **Left Page** button until you reach the desired contrast level.

*Each press results in the contrast being increased or decreased, depending on which page button you press. Chevron symbols provide visual confirmation of the current level.*

5. Save the contrast level you set by pressing either the telephone's **Done** softkey or the **Exit** button. To re-adjust the contrast, repeat this procedure from Step 1.

### Changing the Display Contrast Using a 4620/4620SW, 4621SW, or 4622SW IP Telephone

1. With the EU24/EU24BL attached to your phone, press the telephone's **Options** button to access the Options Main screen.
2. Select the **Contrast Control** option from the Options Main screen.
3. Press the Line/Feature button on either side of the column in which you see the expansion module's model number, for example, **EU24**. Doing so identifies that you want to adjust the display contrast and highlights that line.
4. To brighten the contrast, press the telephone's **Right Arrow** softkey until you reach the desired contrast level. To dim the contrast, press the telephone's **Left Arrow** softkey until you reach the desired contrast level.

*Each softkey press results in the contrast being increased or decreased, depending on which arrow softkey you press. Chevron symbols provide visual confirmation of the current level.*

5. Save the contrast level you set by pressing the telephone's **Save** softkey. To restore the previous setting without changing the contrast, press the **Cancel** softkey.

*The first Options Main screen displays.*

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## Understanding Call Appearance/Feature Button Status Icons

When a call arrives for a call appearance on the EU24/EU24BL Expansion Module, the bell icon blinks on the corresponding call appearance. To answer the call, press the button associated with the call appearance.

The icons displayed on the call appearance allow you to determine the status, for example, on Hold, of each call on the EU24/EU24BL Expansion Module. [Table 1](#) contains an explanation of these icons.

**Table 1: EU24/EU24BL Status Icons**

Icon	Condition	Definition
None	Idle	The call appearance line is available, or the feature is off.
	Ringing	An incoming call is waiting to be answered.
	Active	The call you are currently handling.
	On hold	A call currently on hold.
	On soft hold	A call put on hold during a transfer or conference.
	Feature/Line active	Button on left side of the display currently is enabled.
	Feature/Line active	Button on right side of the display currently is enabled.
	Feature pending	Your request is being processed but is not immediately available.
	Feature status	The Call Center Q Time feature uses this icon.
	Feature status	The Call Center Aux Work feature uses this icon.
	Feature status	The Call Center Service Observing feature uses this icon.